Buckwheat: An Illinois Crop's Growing Uses

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Over the last century and a half, Illinois farmers learned progressively more about the uses of the crop buckwheat and continue their research today. In the past, buckwheat was often used for human consumption as well as feed for livestock. Eventually, however, its use for improving the soil as well as other crop yields was observed. Although it was common in the Northeast and the northern Midwest since colonial times, buckwheat was a new crop for Illinois in the mid-nineteenth century. In the history of experimentation within the state, Illinois farmers discovered and applied many beneficial uses of buckwheat.

Buckwheat was often used for food in Illinois in the mid-1800s. It was a common ingredient in pancake mix and few people could refuse an offer of a hot buckwheat cake. During the winter in Chicago of 1847, buckwheat flour was sold as an item of general consumption. People were not surprised to see a recipe for better tasting buckwheat cakes in the weekly agricultural journal. Not only supplying food for people, the crop was used to feed animals as well. While good fodder for horses and cattle, there were also some accounts that buckwheat fed in the straw was poisonous to hogs. Despite those accounts, buckwheat was an overall food source for the Illinois populace.

Previously considered a valueless crop by many renowned farmers, buckwheat came to be highly appreciated. In 1851, Chicago's agricultural periodical pronounced "that now the number of those who do not raise it is like that of those who formerly cultivated it, very small". Buckwheat was easily grown and could be sown and harvested within two months. Its quick maturity lessened the workload for farmers. Buckwheat fitted nicely within the agricultural year, ripening in September between the gathering of the common summer and fall crops. Its adaptability also made it a regularly successful crop, with comparative ease in growing in unfavorable soil and outstretched branches that protected the ground from the blazing sun, thus retaining needed moisture. Buckwheat's roots penetrate deep into the ground, and it prevents unwanted plants from growing beneath it. "It is decidedly the best crop to restore fertility and healthful cleanliness to the soil", according to the *Prairie Farmer* in 1851. By 1864, it was common knowledge that buckwheat fertilized the soil and stopped the growth of weeds. Uniquely, honey made from buckwheat conveniently fed the bees during the winter when clover was inaccessible in the harsh rains. Distinct methods of harvesting buckwheat were practiced at this time to achieve ideal yields. The maximum yield was between forty and fifty bushels per acre, although twenty-five to thirty bushels was deemed an adequate amount. Despite strict weather requirements over the course of its growth as well as other uncertainties, buckwheat was considered one of the most rewarding crops a farmer could grow.

Regardless of the many evident benefits of buckwheat, the crop's usage declined after the 1860s. Buckwheat waned as wheat gained importance. While wheat yields increased, buckwheat yields did not, lacking a response to fertility. There was a decline in taste for buckwheat cakes and flour, a decline in demand as livestock feed, little research and breeding effort, and poor response of buckwheat to high fertilization applications and other modern practices. Its inability to adapt to improvement was ill-favored at the same time the yield advantage of modern grains steadily increased. "Buckwheat acreage has decreased every year in

the United States since 1866, and production estimates are no longer given by the United States Department of Agriculture". The crop's relatively low yield and a small demand limited the production. Thus, little buckwheat was grown on Midwestern farms over the course of a century after the 1860s.

In the mid 1970s, buckwheat benefited from resurgence in popularity. The demand for commercially prepared breakfast cereal and buckwheat noodle exports to Japan helped encourage production. The crop's nutritional excellence also assisted in its expansion. Buckwheat contains many nutrients, is the best source of protein in the plant kingdom, and has an amino acid composition nutritionally superior to all cereals, including oats. In the last few decades, buckwheat has been used on small acreages as a specialty crop. Its great potential for serving as a cover crop or a double crop urged farmers to explore it further. New uses for buckwheat increased the crop's business ventures.

After about one hundred and fifty years of uncovering novel information on the uses of buckwheat, new efforts in promoting buckwheat developed more recently in order to grow it for commercial purposed in Illinois. In 1991 the Buckwheat Growers of Illinois formed to help farmers promote buckwheat. The idea was to allow farmers to profit from raising buckwheat while improving their farmland. In 1995, the group raised the crop on approximately 1900 acres at 750 pounds per acre. The members proclaimed the many benefits of buckwheat. It virtually pumps phosphorus into the soil, providing better soil and yields for other crops. Planters growing buckwheat and corn in rotation can expect to harvest three to five bushels more of corn per acre on land where buckwheat was planted beforehand. Buckwheat attracts predatory insects that kill crop-eating pests, thus lessening the need for pesticides. It produces a better crop on poor soils, is less expensive, and is less risky to produce. Along with wheat, buckwheat can produce as much income as a major crop of soybeans or corn. Unlike the major crops, however, buckwheat is beneficial to the soil and can be planted as soon as the wheat is harvested.

In the summer of 1991, officials from the Japanese Buckwheat Millers Association visited the Buckwheat Growers of Illinois to look into heir buckwheat crop. The Illinois organization secured a trial order from the association and the Kasho Company for two hundred metric tons of buckwheat. However, in May 1996 the Buckwheat Growers disbanded after losing their principal customer, the Kasho Company. The former president, Kevin Brussel, has slowly reorganized a smaller-scale buckwheat endeavor and looked at other markets. Thus, more research is being undertaken to promote buckwheat as a commercial crop, an effort that can allow farmers throughout the state and elsewhere to enjoy its countless advantages. [From: "American Housewife", *The Prairie Farmer*, Jan. 1845; "Buckwheat", *The Prairie Farmer*, 1851; "Buckwheat for fodder", *The Prairie Farmer*, 1848; Buckwheat growers of Illinois, "Sustainability in action", http://www.sustainable.org/casestudies/SIA_PDFs/SIA_illinois.pdf, 2003 ; "Buckwheat poisonous to hogs", *The Prairie Farmer*, Oct. 16, 1848; Annie Hassall, "Buckwheat", http://mckenna.cses.vt.edu/cses3444/3444lec14.html, Sept. 25, 2003; Robert Meyers and Louis J. Meinke, "Buckwheat: a multi-purpose, short-season alternative", University of Missouri-Columbia, http://muextension.missouri.edu/xplor/agguides/crops/g04306.htm, Sept. 25, 2003; E.S. Oplinger, E.A. Oelke, M.A. Brinkman and K.A. Kelling, *Alternative Field Crops Manual*, (online), http://newcrop.hort.purdue.edu/newcrop/afcm/buckwheat.html, Sept. 25, 2003; John Pike, "Buckwheat production in Illinois: an analysis of production practices and marketing possibilities", www.siu.edu/~readi/grains/buckreport.htm, Sept. 8, 2003; A. Willard, "Culture of buckwheat", *The Prairie Farmer*, 1864.]